Aug. 13, 2019

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Expanding Flexible Use of the 3.7 GHz to 4.2 GHz Band, GN Docket No. 18-122
Response to Public Notice dated July 19, 2019

Dear Ms. Dortch:

Learfield IMG College files these comments in response to the Public Notice issued July 19, 2019 requesting comment, among other things, on the proposal recently made by ACA Connects ("ACA"), Charter Communications ("Charter"), and the Competitive Carriers Association ("CCA") that purports to clear up to 370 MHz of C-band spectrum by relying, at least in part, on fibering earth stations (the "ACA/Charter/CCA Proposal").[1] ACA, Charter and CCA state that under their proposal, 370 MHz will be cleared in 18 months in urban areas and that the satellite industry need not launch additional satellites in order for this to occur. Learfield IMG College wishes to raise the following concerns regarding the ACA/Charter/CCA proposal.

Timing. As an initial matter, today, fiber is a limited component of the video and audio distribution ecosystem in the U.S. Outfitting our facilities, data centers and cable headends with the required equipment is a considerable amount of effort that requires design, deployment and testing before it can be commissioned for service. Agreements will need to be put in place to ensure protection of our valuable content. Then, there is the issue of deploying the fiber itself. Even in urban areas, the assertion that all urban cable headends could be moved off satellite and onto fiber in 18 months is, in our experience, too aggressive and not realistic. Indeed, in some cities, it can take more than 18 months to get the permits and rights of way required to lay fiber to cable headends, and broadcaster facilities where it is not currently available or where diverse and redundant fiber paths are not yet provided. Further, as the C-Band Alliance has noted, there would need to be an extensive testing period for each fiber connection before utilization of satellite service could cease in order to ensure that the fiber configuration is providing the quality and reliability that we would require. Additionally, our understanding is that the transmission from the wireless base stations do not stop at the urban boundaries and can extend tens of kilometers and even as much as 100 kilometers. As such, "adjacent" headends up to 100 kilometers from an urban center, likely numbering in the many hundreds, will also need to be

[1] *Wireless Telecommunications Bureau, International Bureau, Office of Engineering and Technology, and Office of Economics and Analytics Seek Focused Additional Comment in 3.7-4.2 GHz Band Proceeding*, Public Notice, GN Docket No. 18, 122, RM-11791, RM-11778 (rel. Jul. 19, 2019) (DA 19-678).

connected via fiber in the 18 months period. Many of these headends are likely in rural areas which, according to the ACA/Charter/CCA Proposal, will take much longer than 18 months to get connected. Given all of these elements, we find it virtually impossible to see an urban fiber solution for headends in less than 5 years, let alone 18 months.

Service Quality. The public notice asks, "How would sufficient network reliability be achieved?" We are appreciative that the FCC acknowledged an issue that is critical to us. As has been clearly articulated on the record, "no other distribution method matches the C-band in ubiquity and reliability".[2] It appears to us that under the ACA/Charter/CCA Proposal, our content would be riding on hundreds of individual point-to-point fiber connections instead of a single, integrated, and highly reliable C-Band network solution. Appropriate redundancy and secure network design must be fully incorporated into any solution to avoid negatively affecting service quality to nearly 120 million American homes. We need an end-to-end service level agreement that is managed by one party that will ensure our valuable content is transmitted reliably over the many diverse fiber paths and multiple data centers that are contemplated in the ACA/Charter/CCA Proposal.

Transition Accountability. Under the ACA/Charter/CCA Proposal, it is not clear to us who would be responsible for managing the process of transitioning what could easily be hundreds of individually-owned cable headends in the urban areas from satellite to fiber. For example, who will be accountable for ensuring that the nationwide fiber roll out is accomplished in a coordinated timeframe? Without full attention to that, we could be forced to operate two separate networks indefinitely. Will additional burdens be placed on programmers and broadcasters, such as filing progress reports with the FCC reporting on each of our urban distribution points – or will such progress reports be required of some other party? And, importantly, the C-Band Alliance has put on the record a contractual commitment regarding the scheduling, ongoing availability and reliability of our total network.[3] Who will be making that commitment in a fiber environment? These are critical questions that the Commission would need to answer before it adopts any plan that relies on fiber as a means of clearing C-band spectrum in any geographical area.

Increased Costs. Even if, as the ACA/Charter/CCA Proposal suggests, initial fiber costs will be paid for by auction revenues, that does not eliminate the financial burden to Learfield IMG College of having to rely, at least in part, on a fiber distribution system, which would result in increased operations and staffing costs beyond the costs we incur today. The ACA/Charter/CCA Proposal asserts that in step one "programmers would purchase IRUs and install equipment necessary to deliver their programming to between 40 and 50 existing data centers across the contiguous U.S."[4] Presumably these costs would be reimbursed from auction proceeds. However, there would be additional costs to programmers and broadcasters associated with

---

[2] Letter from Matthew S. DelNero, Counsel for the Content Companies, GN Dkt. No. 18-122 (June 7, 2019) (emphasis in original).

[3] Letter from Henry Gola, Counsel for the C-Band Alliance, GN Dkt. No. 18-122 (Apr. 3, 2019).

[4] ACA/Charter/CCA July 2, 2019 Ex Parte Letter at 4.

hiring technical personnel knowledgeable about architecting and maintaining a fiber delivery system. Are cable programmers and broadcasters expected to pay the increased operating costs of using both a fiber network and satellites, the latter of which would continue to be needed to serve rural cable headends -- the "few select areas" that would take five years to fiber, according to ACA, Charter and CCA Proposal?[5] The reason Learfield IMG College uses C-band is because it is extremely cost-efficient and maintains the highest technological reliability in the broadcast industry. We do not want to incur additional expenses and hire additional staff as a result of being forced to use fiber in addition to satellite for at least five – and quite possibly more -- years.

No Additional Satellites. As the Commission is aware, CBA members have committed publicly to launching new satellites to ensure that they have the same total on-orbit capacity to carry video and other services in 300 MHz of spectrum that they carry today with 500 MHz.[6] And the CBA has asserted that these new satellites will be needed in order to clear the 200 MHz in 36 months.[7] In their proposal, ACA, Charter and CCA assert that these satellites need not be built and launched in order to clear 370 MHz in 36 months. Their plan appears to assume that non-MVPD programming – which they assert can be served with 130 MHz -- can exist on the current on-orbit satellites, while MVPD programming would move to fiber. However, even their own documents concede that not all cable headends will be fibered in 36 months – some will take five years. Thus, all MVPD and non-MVPD programming will be required to be carried for at least five years on satellite. Furthermore, the proposal assumes that the content that must continue during the transition can be transmitted from any of the 24 satellites operating over the U.S. orbital arc. Implementing such an approach would require cable headends to install new antennas pointing to new orbital locations. Not only would this add complexity to an already complex proposal, it would also add time, assuming cable headends have the real estate to host new antennas. The proposal also ignores the fact that any plan that requires satellite-delivered content to move from one frequency (or satellite) to another must allow for up to three months of dual illumination to ensure all earth stations are properly pointed and tuned. Dual illumination means that twice the satellite capacity is needed to deliver the same content during the relevant period. The ACA/Charter/CCA Proposal's assertion that 370 MHz can be cleared in 36 months without new satellites being built is simply false, and this miscalculation renders their 'estimated', but not committed timetable, without credibility.

---

5 *Id.*

6 *See, e.g.*, Letter from Jennifer D. Hindin, Counsel for the C-Band Alliance, GN Dkt. No. 18-122 (Feb. 7, 2019).

7 *See* Letter from Jennifer D. Hindin, Counsel for the C-Band Alliance, GN Dkt No. 18-122 (Apr. 9, 2019), Attachment at 6.

From the beginning of the FCC's inquiry, programmers and broadcasters have sought certainty regarding the operating environments for our businesses. Implementing a fiber solution will have vast implications for every programmer and broadcaster in the United States and will take time to complete, which will further disrupt our business. Before adopting the ACA/Charter/CCA Proposal, we urge the Commission to address the concerns raised herein.

Respectfully submitted,

/s/ Randy W. Williams
Randy W. Williams
Chief Engineer
Learfield IMG College
505 Hobbs Road
Jefferson City, MO 65109